

[What is claimed is]

1. A liquid crystal display device comprising:

a main thin film transistor including a common source electrode supplied with a data signal, a pixel drain electrode opposed to the common source electrode as having a predetermined main channel between them and connected to a first pixel electrode for driving the liquid crystal of a first horizontal line, and a gate electrode for switching on/off the main channel in response to a scan signal; and

an auxiliary thin film transistor including the common source electrode and the gate electrode in the main thin film transistor, and a repair drain electrode opposed to the common source electrode as having a predetermined auxiliary channel between them and formed to overlap with a second pixel electrode for driving the liquid crystal of a second horizontal line,

wherein active layers forming the main channel and the auxiliary channel are connected with each other in the common source electrode area.

2. The liquid crystal display device according to claim 1, further comprising:

a gate insulating film formed to cover the gate electrode and the gate line on a substrate;

a semiconductor layer formed on the gate insulating film;

a protective film formed on the entire surface of the gate insulating film to cover the common source electrode, the pixel drain electrode and the repair drain electrode; and

a contact hole formed in the protective film for electrically connecting the pixel drain electrode with the pixel electrode.

3. The liquid crystal display device according to claim 2, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor, the auxiliary thin film transistor and a data line.

4. The liquid crystal display device according to claim 2,

wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor and the auxiliary thin film transistor.

5. The liquid crystal display device according to claim 1, further comprising:

a gate insulating film formed to cover the gate electrode and the gate line on a substrate;

a semiconductor layer formed on the gate insulating film;

a protective film formed on the entire surface of the gate insulating film to cover the common source electrode, the pixel drain electrode and the repair drain electrode; and

a contact hole formed in the protective film for electrically connecting the pixel drain electrode with the pixel electrode,

wherein the common source electrode, the pixel drain electrode and the repair drain electrode are patterned simultaneously with the semiconductor layer.

6. The liquid crystal display device according to claim 5, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor, the auxiliary thin film transistor and a data line.

7. The liquid crystal display device according to claim 5, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor and the auxiliary thin film transistor.

8. A fabricating method of a liquid crystal display device, comprising the steps of:

forming a gate line and a gate electrode on a substrate;

forming a gate insulating film on the substrate;

forming a semiconductor layer on the gate insulating film;

forming a data line and a common source electrode on the gate insulating film, and in addition, forming a pixel drain electrode and a repair drain electrode to oppose the common source electrode such that a main channel of a main thin film

transistor and an auxiliary channel of an auxiliary thin film transistor reside in the semiconductor layer together;

forming a protective film on the gate insulating film to cover the common source electrode, the pixel drain electrode and the repair drain electrode; and

forming a pixel electrode on the protective film to overlap with the repair drain electrode and to be electrically in contact with the pixel drain electrode.

9. The fabricating method of the liquid crystal display device according to claim 8, wherein the gate electrodes of the main thin film transistor and the auxiliary thin film transistor are unified in the common source electrode area.

10. The fabricating method of the liquid crystal display device according to claim 8, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor, the auxiliary thin film transistor and the data line.

11. The fabricating method of the liquid crystal display device according to claim 8, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor and the auxiliary thin film transistor.

12. A fabricating method of a liquid crystal display device, comprising the steps of:

forming a gate line and a gate electrode on a substrate;

forming a gate insulating film on the substrate to cover the gate electrode and the gate line;

forming a semiconductor layer, a common source electrode and a data line by depositing a semiconductor material and a metal layer on the gate insulating film and patterning them together, and in addition, forming a pixel drain electrode and a repair drain electrode to oppose the common source electrode such that a main channel of a main thin film transistor and an auxiliary channel of an auxiliary thin film transistor reside in the semiconductor layer together;

forming a protective film on the gate insulating film to

cover the common source electrode, the pixel drain electrode and the repair drain electrode; and

forming a pixel electrode on the protective film to overlap with the repair drain electrode and to be electrically in contact with the pixel drain electrode.

13. The fabricating method of the liquid crystal display device according to claim 12, wherein the gate electrodes of the main thin film transistor and the auxiliary thin film transistor are unified in the common source electrode area.

14. The fabricating method of the liquid crystal display device according to claim 12, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor, the auxiliary thin film transistor and the data line.

15. The fabricating method of the liquid crystal display device according to claim 12, wherein the semiconductor layer is formed at the peripheral area of the main thin film transistor and the auxiliary thin film transistor.

16. A repairing method of a liquid crystal display device, comprising the steps of:

connecting a pixel drain electrode for driving to a pixel electrode of a first horizontal line, and in addition, providing a thin film transistor including a repair drain electrode that overlaps with a pixel electrode of a second horizontal line;

sensing a bad pixel included in the horizontal lines;

opening a part of a drain electrode for driving of the bad pixel; and

connecting the repair drain electrode to the pixel electrode of the bad pixel such that the same color data as a normal pixel is supplied to the pixel electrode of the bad pixel.